

# Challenges for Viable RESCOs

Art Lilley, VP

Community Power Corporation

Village Power '98

October 6-8, 1998

Washington, DC

# Outline

---

- Definition
- Challenges
  - Customers
  - Competition
  - Funding
  - Setup
  - Operation
  - Uncontrollables
- Conclusions

# Definition: Energy Service Company

---

An entity delivering application-based energy products and/or services, at market prices, over time, to customers isolated from a formal energy supply network.

# Further Clarification

---

- Entity:
  - sole proprietor, corporation, govt. agency, cooperative, NGO, etc.
  - both for-profit and not-for-profit
- Application-based: focus on application of energy not on kWh sales
- Energy-based products or services: Liquid fuels, solid fuels, maintenance/repair/charging services, consumable materials (batteries, candles, wicks, globes, mantles), etc.
- Market price: Value of the energy service weighed against the user's willingness and ability to pay; not a regulated price or uniform tariff
- Over time: long-term relationship not a one-time product sale
- Customers isolated from formal energy supply network: Typically homeowners and small enterprises without near term access to a grid.

# Examples Meeting the Definition

## Conventional ESCOs

- Retail sellers of conventional fuels: kerosene, diesel fuel, firewood, dry cell batteries, candles, bottled gas
- Entrepreneurs selling energy services from an engine generator:
  - battery charging
  - light fixtures and power points for near-by neighbors
- Community-based AC power systems: gen-set, hydro

## Emerging ESCOs (RESCOs)

- PV battery charging or solar home system leasing companies
- Community-based AC power system: hybrid, wind, biomass, etc.

# Finding/Attracting Consumers

---

- Are they serviceable?
  - site accessibility
  - resource
- Enough of them?
- Density?
- Willing and able to pay?
- Willing and able to purchase?

# Case Study to Determine Whether Rural Consumers Prefer SHS Leasing or Ownership

---

- **Payment Options Offered: Assumptions:**

1. Cash: 100% down
2. Credit: 25% down, pay balance up to 7 years
3. Lease: 2 month installation fee, pay to perpetuity, 10% annual price increase

- **Relative discount rate/Present value of \$1 in yr. 10:**

1. Cash: (0%-\$1.00)
2. Credit: 1 yr. (6%-\$0.56), 4 yr. (13%-\$0.29), 7 yr. (16%-\$0.23)
3. Lease: perpetuity (25%-\$0.11)

—————→  
Preferred Option

## Reasons Given By Consumers Why SHS Leasing is Preferred Over Ownership

---

- Familiar with incremental purchase of energy
- Equipment down payment is a large portion of savings
- Leasing:
  - relieves perceived maintenance burden
  - puts seller on hook for performance
  - permits “try and see if it is as advertised”
- Don't want to own equipment in case...
  - equipment fails, is stolen, is damaged, etc.
  - something better/cheaper may come along
  - grid may come soon

# RESCO Has Many Advantages Compared to Dealer Model\*

---

Characteristic	Leasing (RESCO)	Direct Sale (Dealer)
Market Penetration	>70%	<30%
Term of Relationship	Long	Short
Differentiating Factor	Service	Price
Maintenance Performed by	Technician	Consumer
Consumer Flexibility	Maximum	Minimum

\*From consumer's perspective

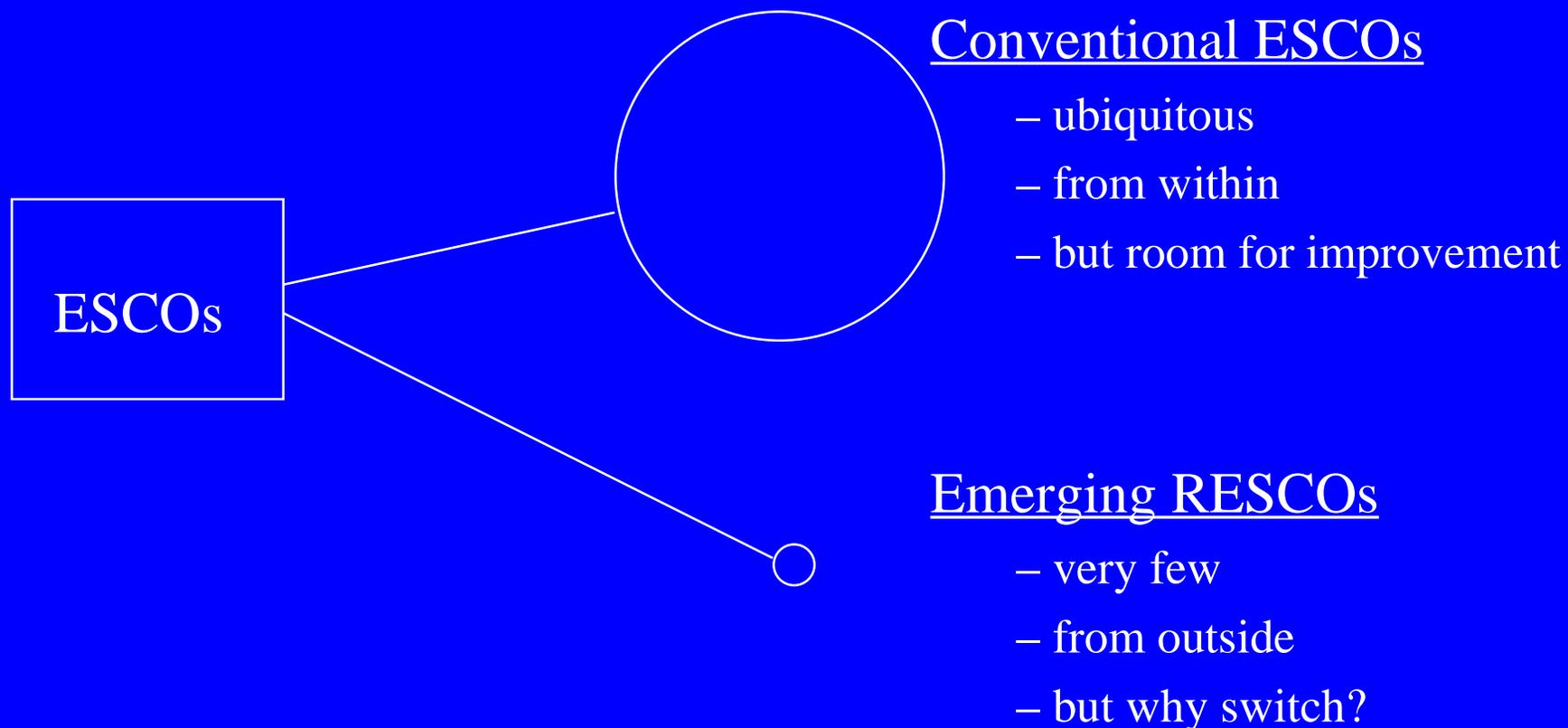
# Competition

---

- Legality?
- Grid?
  - distance
  - plans
  - connection costs
- Nearby subsidized projects?
- Nearby ESCOs?

# Conventional ESCOs Are The RESCOs Major Competitors

---



# Conventional ESCOs Have Significant Competitive Advantages

---

- Standard offerings, some highly subsidized
- Purchase transaction is...
  - very simple
  - quick
- Often there is a semblance of price competition
- Buyer/seller relationship exists
- Has become ingrained
- Why change?

# CPC's RESCO Strategy to Reduce Consumer's Resistance to Change

---

- Make advantage apparent to user
- Make service fit with user's current methods
- Use known words/concepts to explain idea
- Make it easy to get in/get out
- Make sure user understands the worst case
- Price for high perceived value

# Getting Funded

---

- Credible Business Plan?
- Credible Investor?
- Mutually Acceptable Terms?
  - form of investment
  - cost of money
  - payback
- What If?

# Startup

---

- Staffing?
- Procurement?
- Logistics?
- Installation?
- User training?

# Operation

---

- System performance?
  - equipment
  - staff
  - processes and procedures
- Financial Performance?
  - revenue collection/defaults
  - unplanned maintenance/repair
  - theft/diddling
- Customer Satisfaction?

# Uncontrollables

---

- Currency
- Inflation
- Stability
- Weather
- Disasters

# Current Status

---

- Staying involved
  - customer satisfaction remains high
  - maintaining strategic relationships
- Adapting
  - pursuing high value productive uses of renewables
  - evaluating opportunities for small modular biopower
- Monitoring situation
- Preparing for recovery

# Conclusions

---

## RESCOs...

- ...are relatively new, but exist in many countries with large rural populations
- ...are a logical step in the evolution of renewable energy delivery mechanisms
- ...are more customer-friendly than direct sales models
- ...have great untapped potential for deploying renewable energy-based products and services to rural people
- ...can meet the challenge